RAW SEQUENCE LISTING

Loaded by SCORE, no errors detected.

Application Serial Number: 10567764

Source: OIPE

Date Processed by SCORE: 7/24/07

ENTERED

```
<110> APPLICANT: Flannery, Carl R
      Corcoran, Christopher J
      Freeman, Bethany A
      Racie, Lisa A
<120> TITLE OF INVENTION: RECOMBINANT LUBRICIN MOLECULES AND USES
THEREOF
<130> FILE REFERENCE: 19003-002US1
<140> CURRENT APPLICATION NUMBER:10567764
<141> CURRENT FILING DATE:2006-09-27
<150> PRIOR APPLICATION NUMBER: PCT/US2004/026508
<151> PRIOR FILING DATE: 2004-08-13
<150> PRIOR APPLICATION NUMBER: US 60/495,741
<151> PRIOR FILING DATE: 2003-08-14
<160> NUMBER OF SEQ ID NOS: 29
<170> SOFTWARE: PatentIn version 3.3
<210> SEQ ID NO 1
<211> LENGTH: 155
<212> TYPE: DNA
<213> ORGANISM: Artificial
<220> FEATURE:
<223> OTHER INFORMATION: Nucleotide sequence of synthetic cDNA cassette-
<400> SEQUENCE: 1
      cgcgcccaca actccaaaag agcccgcacc taccacgaca aagtcagctc ctactacgcc
60
      caaagagcca gcgccgacga ctactaaaga accggcaccc accacqccta aqqaqccaqc
120
      tcctactaca acgaaaccgg caccaaccac tccgg
155
<210> SEO ID NO 2
<211> LENGTH: 51
<212> TYPE: PRT
<213> ORGANISM: Artificial
<220> FEATURE:
<223> OTHER INFORMATION: Translation of SEQ ID NO: 1.
<400> SEQUENCE: 2
      Ala Pro Thr Thr Pro Lys Glu Pro Ala Pro Thr Thr Lys Ser Ala
      Pro Thr Thr Pro Lys Glu Pro Ala Pro Thr Thr Lys Glu Pro Ala
                                      25
      Pro Thr Thr Pro Lys Glu Pro Ala Pro Thr Thr Lys Pro Ala Pro
                                  40
      Thr Thr Pro
          50
<210> SEQ ID NO 3
<211> LENGTH: 125
<212> TYPE: DNA
<213> ORGANISM: Artificial
<220> FEATURE:
<223> OTHER INFORMATION: Nucleotide sequence of synthetic cDNA cassette-
<400> SEQUENCE: 3
      taaagaacca gcccctacta cgacaaagga gcctgcaccc acaaccacga agagcgcacc
60
     cacaacaca aaggagccgg cccctacgac tcctaaggaa cccaaaccgg caccaaccac
120
      tccgg
```

```
<210> SEQ ID NO 4
<211> LENGTH: 41
<212> TYPE: PRT
<213> ORGANISM: Artificial
<220> FEATURE:
<223> OTHER INFORMATION: Translation of SEQ ID NO: 3.
<400> SEQUENCE: 4
      Lys Glu Pro Ala Pro Thr Thr Lys Glu Pro Ala Pro Thr Thr Thr
                                          10
      Lys Ser Ala Pro Thr Thr Pro Lys Glu Pro Ala Pro Thr Thr Pro Lys
                                      25
      Glu Pro Lys Pro Ala Pro Thr Thr Pro
<210> SEQ ID NO 5
<211> LENGTH: 8049
<212> TYPE: DNA
<213> ORGANISM: Artificial
<220> FEATURE:
<223> OTHER INFORMATION: pTmed2 vector containing recombinant PRG4-Lub:1
cDNA construct.
<400> SEQUENCE: 5
      catatgcggt gtgaaatacc gcacagatgc gtaaggagaa aataccgcat caggcgtact
60
      gagtcattag ggactttcca atgggttttg cccagtacat aaggtcaata ggggtgaatc
120
      aacaggaaag tcccattgga gccaagtaca ctgagtcaat agggactttc cattgggttt
180
      tgcccagtac aaaaggtcaa tagggggtga gtcaatgggt ttttcccatt attggcacgt
240
      acataaggtc aataggggtg agtcattggg tttttccagc caatttaatt aaaacgccat
300
      gtactttccc accattgacg tcaatgggct attgaaacta atgcaacgtg acctttaaac
360
      ggtactttcc catagctgat taatgggaaa gtaccgttct cgagccaata cacgtcaatg
420
      ggaagtgaaa gggcagccaa aacgtaacac cgccccggtt ttcccctgga aattccatat
480
      tggcacgcat tctattggct gagctgcgtt ctacgtgggt ataagaggcg cgaccagcgt
540
      eggtacegte geagtetteg gtetgaceae egtagaaege agageteete getgeageee
600
      aagetetgtt gggetegegg ttgaggacaa aetettegeg gtettteeag taetettgga
660
      tcggaaaccc gtcggcctcc gaacggtact ccgccaccga gggacctgag cgagtccgca
720
      tegaceggat eggaaaacet etegaetgtt ggggtgagta etecetetea aaagegggea
780
      tgacttctgc gctaagattg tcagtttcca aaaacgagga ggatttgata ttcacctggc
840
      ccgcggtgat gcctttgagg gtggccgcgt ccatctggtc agaaaagaca atctttttgt
900
      tgtcaagctt gaggtgtggc aggcttgaga tctggccata cacttgagtg acaatgacat
960
      ccactttgcc tttctctcca caggtgtcca ctcccaggtc caactgcaga cttcgaattc
1020
      tactgagtcg acccaccatg gcatggaaaa cacttcccat ttacctgttg ttgctgctgt
1080
      ctgttttcgt gattcagcaa gtttcatctc aagatttatc aagctgtgca gggagatgtq
```

1140						
1200	gggaagggta	ttctagagat	gccacctgca	actgtgatta	taactgtcaa	cactacatgg
	agtgctgccc	tgatttcaag	agagtctgca	ctgcggagct	ttcctgtaaa	ggccgctgct
1260	ttgagtcctt	cgagagaggg	agggagtgtg	actgcgacgc	ccaatgtaag	aagtatgaca
1320	agtgctgtcc	cgattatgag	agtttctgtg	cagaagtgca	taatcccaca	tcaccaccat
1380	cttcaaagaa	agcacctcca	ccttcaggag	catctcaaac	catcaaatca	acaaccaaac
1440	gttcacccaa	accaccaaac	aagaagaaga	ctaagaaagt	tatagaatca	gaggaaataa
1500	cagaagaaca	ttctgtttct	gaaaatcaag	agtcctcctc	cagtagcagt	tcaagtagtt
1560	cgtcgtcgac	aatttggaaa	atcaagtctt	ccaaaaattc	agctgctaat	agagaattac
1620	agaagaaact	caaagtaaaa	gataacaaga	agaacagaac	taaaaagaaa	cctaccccca
1680	aaccaccagt	tgtagatgaa	gctggaagtg	gattggacaa	tggtgacttc	aaggtcacaa
1740	ctcctgacac	gtctaccacc	caacacaata	aagtcagcac	atctcccaag	atcacaacag
1800	caaaaccaat	aaatcccaga	cccagtcttc	cacctaattc	tgatacatct	aaagagacgt
1860	ctttgacagt	gaataaagag	acaacagttg	aaactaaaga	aactactaca	acaaataaac
1920	agacttcaac	tgatggaaaa	gagaagacta	cttccgctaa	agagacacaa	agtatagaga
1980	aaacatctgc	taaagattta	gcacccacat	ctaaagtgct	ggctaaacct	acacccaaag
2040	ctgaaactac	aaccaaaggc	cctgctctca	ccactcccaa	ggagcccacg	cccaccactc
2100	ccaaggagcc	tgcatctacc	acacccaaag	agcccacacc	taccaccatc	aagagcgcgc
2160	ccacaactcc	aaaagagccc	gcacctacca	cgacaaagtc	agctcctact	acgcccaaag
2220	agccagcgcc	gacgactact	aaagaaccgg	cacccaccac	gcctaaggag	ccagctccta
2280	ctacaacgaa	accggcacca	accactccgg	aaacacctcc	tccaaccact	tcagaggtct
2340	ctactccaac	taccaccaag	gagcctacca	ctatccacaa	aagccctgat	gaatcaactc
2400	ctgagctttc	tgcagaaccc	acaccaaaag	ctcttgaaaa	cagtcccaag	gaacctggtg
2460	tacctacaac	taagacgccg	gcggcgacta	aacctgaaat	gactacaaca	gctaaagaca
2520	agacaacaga	aagagactta	cgtactacac	ctgaaactac	aactgctgca	cctaagatga
2580	caaaagagac	agcaactaca	acagaaaaaa	ctaccgaatc	caaaataaca	gctacaacca
2640	cacaagtaac	atctaccaca	actcaagata	ccacaccatt	caaaattact	actcttaaaa
2700	caactactct	tgcacccaaa	gtaactacaa	caaaaaagac	aattactacc	actgagatta
2760	tgaacaaacc	tgaagaaaca	gctaaaccaa	aagacagagc	tactaattct	aaagcgacaa
2820	ctcctaaacc	tcaaaagcca	accaaagcac	ccaaaaaacc	cacttctacc	aaaaagccaa
2880	aaacaatgcc	tagagtgaga	aaaccaaaga	cgacaccaac	tccccgcaag	atgacatcaa
2940	_				_	

			1.1				
3 (000		attgaaccct				
3 (060		aactccaaac				
3:	120	gtggtgctga	aggagaaaca	cctcatatgc	ttctcaggcc	ccatgtgttc	atgcctgaag
3:	180	ttactcccga	catggattac	ttaccgagag	tacccaatca	aggcattatc	atcaatccca
	240	tgctttccga	tgagaccaat	atatgcaatg	gtaagccagt	agatggactg	actactttgc
	300	gcaatgggac	attagttgca	ttccgaggtc	attatttctg	gatgctaagt	ccattcagtc
	360	caccatctcc	agctcgcaga	attactgaag	tttggggtat	tccttcccc	attgatactg
	120	tttttactag	gtgcaactgt	gaaggaaaaa	ctttcttctt	taaggattct	cagtactggc
	180	gttttaccaa	tgatataaaa	gatgcagggt	accccaaacc	aattttcaaa	ggatttggag
	540	gactaactgg	acaaatagtg	gcagcgcttt	caacagctaa	atataagaac	tggcctgaat
	500	ctgtgtattt	tttcaagaga	ggtggcagca	ttcagcagta	tatttataaa	caggaacctg
	560	tacagaagtg	ccctggaaga	aggcctgctc	taaattatcc	agtgtatgga	gaaatgacac
	720	aggttaggag	acgtcgcttt	gaacgtgcta	taggaccttc	tcaaacacac	accatcagaa
	780	ttcaatattc	acctgccaga	ctggcttatc	aagacaaagg	tgtccttcat	aatgaagtta
	340	aagtgagtat	actgtggaga	ggacttccaa	atgtggttac	ctcagctata	tcactgccca
	900	acatcagaaa	acctgacggc	tatgattact	atgccttttc	taaagatcaa	tactataaca
	960	ttgatgtgcc	tagtagaaca	gcaagagcaa	ttactactcg	ttctgggcag	accttatcca
	020	aagtctggta	caactgtcct	taagcggccg	ccgcaaattc	taacgttact	ggccgaagcc
	080	gcttggaata	aggccggtgt	gcgtttgtct	atatgttatt	ttccaccata	ttgccgtctt
	140	ttggcaatgt	gagggcccgg	aaacctggcc	ctgtcttctt	gacgagcatt	cctaggggtc
	200	tttcccctct	cgccaaagga	atgcaaggtc	tgttgaatgt	cgtgaaggaa	gcagttcctc
	260	tggaagcttc	ttgaagacaa	acaacgtctg	tagcgaccct	ttgcaggcag	cggaaccccc
	320	cacctggcga	caggtgcctc	tgcggccaaa	agccacgtgt	ataagataca	cctgcaaagg
	380	cggcacaacc	ccagtgccac	gttgtgagtt	ggatagttgt	ggaaagagtc	aaatggctct
	140	cctcaagcgt	attcaacaag	gggctgaagg	atgcccagaa	ggtaccccat	tgtatgggat
		ctgatctggg	gcctcggtgc	acatgcttta	catgtgttta	gtcgaggtta	aaaaacgtct
	500	aggccccccg	aaccacgggg	acgtggtttt	cctttgaaaa	acacgattgc	tcgagccatc
	560	atggttcgac	cattgaactg	catcgtcgcc	gtgtcccaaa	atatggggat	tggcaagaac
	520	ggagacctac	cctggcctcc	gctcaggaac	gagttcaagt	acttccaaag	aatgaccaca
	340	acctcttcag	tggaaggtaa	acagaatctg	gtgattatgg	gtaggaaaac	ctggttctcc
4	740	attcctgaga	agaatcgacc	tttaaaggac	agaattaata	tagttctcag	tagagaactc

4800	aaagaaccac	cacgaggagc	tcattttctt	gccaaaagtt	tggatgatgc	cttaagactt
4860		cggaattggc				
4920		aagccatgaa				
4980						
5040		aaagtgacac				
5100		caggcgtcct				
5160		agaagaaaga				
5220	aagctatgca	ttttttataa	gaccatggga	cttttgctgg	ctttagatca	taatcagcca
5280	taccacattt	gtagaggttt	tacttgcttt	aaaaaacctc	ccacacctcc	ccctgaacct
5340	gaaacataaa	atgaatgcaa	ttgttgttgt	taacttgttt	attgcagctt	ataatggtta
5400	caaataaagc	aatagcatca	caaatttcac	aaataaagca	ttttttcac	tgcattctag
5460	ttgtggtttg	tccaaactca	tcaatgtatc	ttatcatgtc	tggatccccg	gccaacggtc
5520	tggtgacccg	gctgcgagag	ctcggtgtac	ctgagacgcg	agtaagccct	tgagtcaaag
5580	acgtagtcgt	tgcaagtccg	caccaggtac	tgatcatcga	tgctagaccg	tgcaaaagga
5640	gagcctgtaa	gcgggcactc	ttccgtggtc	tggtggataa	attcgcaagg	gtatcatggc
	ggacgaccgg	ggttcgaacc	ccggatccgg	ccgtccgccg	tgatccatcc	ggttaccgcc
5700	cgcgtgtcga	acccaggtgt	gcgacgtcag	acaacggggg	agcgctcctt	ttggcttcct
5760	tccaggcgcg	gcggctgctg	cgctagcttt	tttggcgagc	tcgaattaat	tctgcattaa
5820	tgaatcggcc	aacgcgcggg	gagaggcggt	ttgcgtattg	ggcgctcttc	cgcttcctcg
5880	ctcactgact	cgctgcgctc	ggtcgttcgg	ctgcggcgag	cggtatcagc	tcactcaaag
5940	gcggtaatac	ggttatccac	agaatcaggg	gataacgcag	gaaagaacat	gtgagcaaaa
6000	ggccagcaaa	aggccaggaa	ccgtaaaaag	gccgcgttgc	tggcgttttt	ccataggctc
6060		acgagcatca				
6120		gataccaggc				
6180		ttaccggata				
6240		gctgtaggta				
6300						
6360		ccccgttca				
6420		taagacacga				
6480		atgtaggcgg				
6540		cagtatttgg				
6600	gttggtagct	cttgatccgg	caaacaaacc	accgctggta	gcggtggttt	ttttgtttgc